

Release notes for ENDF/B Development n-058_Ce_140
evaluation

ENDF
B-VII.dev

April 26, 2017

- checkr Warnings:

1. A previous error halted parsing of the current section
MAT=5837, MF= 1, MT=451 (1): Parsing stopped

```
ERROR(S) FOUND IN MAT=5837, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER    287 TO    362
```

- checkr Errors:

1. A variable is outside the allowed ENDF range
MAT=5837, MF= 1, MT=451 (0): Variable range

```
ERROR(S) FOUND IN MAT=5837, MF= 1, MT=451
MOD =      1 OUT OF RANGE      0 -      0      RECORD NUMBER    287
```

2. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 2, MT=151 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5837, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY      RECORD NUMBER    364
```

3. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 1 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY      RECORD NUMBER    570
```

4. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 2
SECTION 3/ 2 NOT IN DIRECTORY      RECORD NUMBER    609
```

5. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 4 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY      RECORD NUMBER    647
```

6. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 16
SECTION 3/ 16 NOT IN DIRECTORY      RECORD NUMBER    665
```

7. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 17
SECTION 3/ 17 NOT IN DIRECTORY RECORD NUMBER 675

8. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 22
SECTION 3/ 22 NOT IN DIRECTORY RECORD NUMBER 681

9. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 28
SECTION 3/ 28 NOT IN DIRECTORY RECORD NUMBER 696

10. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 32 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 32
SECTION 3/ 32 NOT IN DIRECTORY RECORD NUMBER 707

11. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 51
SECTION 3/ 51 NOT IN DIRECTORY RECORD NUMBER 714

12. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 52 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 52
SECTION 3/ 52 NOT IN DIRECTORY RECORD NUMBER 732

13. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 53
SECTION 3/ 53 NOT IN DIRECTORY RECORD NUMBER 749

14. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 54
SECTION 3/ 54 NOT IN DIRECTORY RECORD NUMBER 765

15. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 55 (0): Directory (b)

- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 55 | RECORD NUMBER | 781 |
| SECTION 3/ 55 NOT IN DIRECTORY | | |
16. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 56 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 56 | RECORD NUMBER | 797 |
| SECTION 3/ 56 NOT IN DIRECTORY | | |
17. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 57 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 57 | RECORD NUMBER | 812 |
| SECTION 3/ 57 NOT IN DIRECTORY | | |
18. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 58 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 58 | RECORD NUMBER | 827 |
| SECTION 3/ 58 NOT IN DIRECTORY | | |
19. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 59 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 59 | RECORD NUMBER | 842 |
| SECTION 3/ 59 NOT IN DIRECTORY | | |
20. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 60 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 60 | RECORD NUMBER | 856 |
| SECTION 3/ 60 NOT IN DIRECTORY | | |
21. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 61 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 61 | RECORD NUMBER | 870 |
| SECTION 3/ 61 NOT IN DIRECTORY | | |
22. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 62 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 62 | RECORD NUMBER | 884 |
| SECTION 3/ 62 NOT IN DIRECTORY | | |
23. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 63 (0): Directory (b)

- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 63 | | |
| | SECTION 3/ 63 NOT IN DIRECTORY | RECORD NUMBER | 897 |
24. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 64 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 64 | | |
| | SECTION 3/ 64 NOT IN DIRECTORY | RECORD NUMBER | 910 |
25. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 65 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 65 | | |
| | SECTION 3/ 65 NOT IN DIRECTORY | RECORD NUMBER | 923 |
26. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 66 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 66 | | |
| | SECTION 3/ 66 NOT IN DIRECTORY | RECORD NUMBER | 935 |
27. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 67 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 67 | | |
| | SECTION 3/ 67 NOT IN DIRECTORY | RECORD NUMBER | 947 |
28. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 68 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 68 | | |
| | SECTION 3/ 68 NOT IN DIRECTORY | RECORD NUMBER | 958 |
29. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 69 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 69 | | |
| | SECTION 3/ 69 NOT IN DIRECTORY | RECORD NUMBER | 969 |
30. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 70 (0): Directory (b)
- | | | | |
|--|---|---------------|-----|
| | ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 70 | | |
| | SECTION 3/ 70 NOT IN DIRECTORY | RECORD NUMBER | 980 |
31. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 71 (0): Directory (b)

- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 71 | RECORD NUMBER | 990 |
| SECTION 3/ 71 NOT IN DIRECTORY | | |
32. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 72 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 72 | RECORD NUMBER | 1000 |
| SECTION 3/ 72 NOT IN DIRECTORY | | |
33. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 73 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 73 | RECORD NUMBER | 1010 |
| SECTION 3/ 73 NOT IN DIRECTORY | | |
34. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT= 91 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT= 91 | RECORD NUMBER | 1019 |
| SECTION 3/ 91 NOT IN DIRECTORY | | |
35. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT=102 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT=102 | RECORD NUMBER | 1028 |
| SECTION 3/102 NOT IN DIRECTORY | | |
36. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT=103 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT=103 | RECORD NUMBER | 1054 |
| SECTION 3/103 NOT IN DIRECTORY | | |
37. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT=104 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT=104 | RECORD NUMBER | 1068 |
| SECTION 3/104 NOT IN DIRECTORY | | |
38. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT=105 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT=105 | RECORD NUMBER | 1081 |
| SECTION 3/105 NOT IN DIRECTORY | | |
39. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 3, MT=107 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 3, MT=107 | RECORD NUMBER | 1092 |
| SECTION 3/107 NOT IN DIRECTORY | | |
40. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 2 (0): Directory (b)
- | | | |
|--|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 2 | RECORD NUMBER | 1109 |
| SECTION 4/ 2 NOT IN DIRECTORY | | |
41. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 16 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 16 | RECORD NUMBER | 1329 |
| SECTION 4/ 16 NOT IN DIRECTORY | | |
42. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 17 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 17 | RECORD NUMBER | 1332 |
| SECTION 4/ 17 NOT IN DIRECTORY | | |
43. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 22 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 22 | RECORD NUMBER | 1335 |
| SECTION 4/ 22 NOT IN DIRECTORY | | |
44. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 28 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 28 | RECORD NUMBER | 1338 |
| SECTION 4/ 28 NOT IN DIRECTORY | | |
45. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 32 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 32 | RECORD NUMBER | 1341 |
| SECTION 4/ 32 NOT IN DIRECTORY | | |
46. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 51 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 51 | RECORD NUMBER | 1344 |
| SECTION 4/ 51 NOT IN DIRECTORY | | |
47. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 52 (0): Directory (b)

- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 52 | |
| SECTION 4/ 52 NOT IN DIRECTORY | RECORD NUMBER 1433 |
48. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 53 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 53 | |
| SECTION 4/ 53 NOT IN DIRECTORY | RECORD NUMBER 1459 |
49. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 54 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 54 | |
| SECTION 4/ 54 NOT IN DIRECTORY | RECORD NUMBER 1485 |
50. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 55 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 55 | |
| SECTION 4/ 55 NOT IN DIRECTORY | RECORD NUMBER 1511 |
51. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 56 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 56 | |
| SECTION 4/ 56 NOT IN DIRECTORY | RECORD NUMBER 1537 |
52. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 57 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 57 | |
| SECTION 4/ 57 NOT IN DIRECTORY | RECORD NUMBER 1563 |
53. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 58 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 58 | |
| SECTION 4/ 58 NOT IN DIRECTORY | RECORD NUMBER 1589 |
54. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 59 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 59 | |
| SECTION 4/ 59 NOT IN DIRECTORY | RECORD NUMBER 1673 |
55. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 60 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 60 | RECORD NUMBER | 1699 |
| SECTION 4/ 60 NOT IN DIRECTORY | | |
56. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 61 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 61 | RECORD NUMBER | 1725 |
| SECTION 4/ 61 NOT IN DIRECTORY | | |
57. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 62 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 62 | RECORD NUMBER | 1751 |
| SECTION 4/ 62 NOT IN DIRECTORY | | |
58. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 63 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 63 | RECORD NUMBER | 1777 |
| SECTION 4/ 63 NOT IN DIRECTORY | | |
59. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 64 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 64 | RECORD NUMBER | 1803 |
| SECTION 4/ 64 NOT IN DIRECTORY | | |
60. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 65 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 65 | RECORD NUMBER | 1829 |
| SECTION 4/ 65 NOT IN DIRECTORY | | |
61. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 66 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 66 | RECORD NUMBER | 1854 |
| SECTION 4/ 66 NOT IN DIRECTORY | | |
62. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 67 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 67 | RECORD NUMBER | 1879 |
| SECTION 4/ 67 NOT IN DIRECTORY | | |
63. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 68 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 68 | RECORD NUMBER | 1904 |
| SECTION 4/ 68 NOT IN DIRECTORY | | |
64. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 69 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 69 | RECORD NUMBER | 1929 |
| SECTION 4/ 69 NOT IN DIRECTORY | | |
65. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 70 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 70 | RECORD NUMBER | 1954 |
| SECTION 4/ 70 NOT IN DIRECTORY | | |
66. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 71 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 71 | RECORD NUMBER | 1979 |
| SECTION 4/ 71 NOT IN DIRECTORY | | |
67. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 72 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 72 | RECORD NUMBER | 2004 |
| SECTION 4/ 72 NOT IN DIRECTORY | | |
68. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 73 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 73 | RECORD NUMBER | 2029 |
| SECTION 4/ 73 NOT IN DIRECTORY | | |
69. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 4, MT= 91 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 4, MT= 91 | RECORD NUMBER | 2054 |
| SECTION 4/ 91 NOT IN DIRECTORY | | |
70. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 5, MT= 16 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=5837, MF= 5, MT= 16 | RECORD NUMBER | 2081 |
| SECTION 5/ 16 NOT IN DIRECTORY | | |
71. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 5, MT= 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 5, MT= 17
SECTION 5/ 17 NOT IN DIRECTORY RECORD NUMBER 2142

72. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 5, MT= 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 5, MT= 22
SECTION 5/ 22 NOT IN DIRECTORY RECORD NUMBER 2168

73. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 5, MT= 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 5, MT= 28
SECTION 5/ 28 NOT IN DIRECTORY RECORD NUMBER 2383

74. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 5, MT= 32 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 5, MT= 32
SECTION 5/ 32 NOT IN DIRECTORY RECORD NUMBER 2495

75. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=5837, MF= 5, MT= 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=5837, MF= 5, MT= 91
SECTION 5/ 91 NOT IN DIRECTORY RECORD NUMBER 2533

• **psyche** Warnings:

- Gamma width not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 140. L = 0 / AT RESONANCE ENERGY 4.93900E+04 EV. THE GAMMA WIDTH 1.37000E-01 DEVIATES TOO MUCH FROM THE AVERAGE 4.30488E-02 (0): Gamma width

FILE 2
SECTION 151
ISOTOPE MASS = 140. L = 0
AT RESONANCE ENERGY 4.93900E+04 EV. THE GAMMA WIDTH 1.37000E-01 DEVIATES TOO MUCH FROM THE AV

- Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 140. L = 0 / STRENGTH FUNCTION IS 1.16939E-04 / STRENGTH FUNCTION 1.16939E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

FILE 2
SECTION 151
ISOTOPE MASS = 140. L = 0
STRENGTH FUNCTION IS 1.16939E-04
STRENGTH FUNCTION 1.16939E-04
... [1 more lines]

3. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 140. L = 1 / STRENGTH FUNCTION IS 2.55187E-05 / AVERAGE GAMMA WIDTH 2.25840E-02 / LIES OUTSIDE LIMITS 4.00000E-02 TO 9.00000E+00 EV. (0): URR str. ftn.

```
FILE 2
SECTION 151
ISOTOPE MASS = 140. L = 1
STRENGTH FUNCTION IS 2.55187E-05
AVERAGE GAMMA WIDTH 2.25840E-02
... [1 more lines]
```

4. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 140. L = 1 / STRENGTH FUNCTION 2.55187E-05 / LIES OUTSIDE LIMITS 1.00000E-04 TO 8.00000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ISOTOPE MASS = 140. L = 1
STRENGTH FUNCTION 2.55187E-05
LIES OUTSIDE LIMITS 1.00000E-04 TO 8.00000E-04
```

- fudge-4.0 Warnings:

1. Missing a channel with a particular angular momenta combination
resonances / resolved / MultiLevelBreitWigner (Error # 0): missingResonanceChannel

```
WARNING: Missing a channel with angular momenta combination L = 0, J = 1.5 and S = 1.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 1, J = 0.5 and S = 1.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 1, J = 1.5 and S = 1.5 for "capture"
WARNING: Missing a channel with angular momenta combination L = 1, J = 2.5 and S = 1.5 for "capture"
```

2. Potential scattering hasn't converted, you need more L's!
resonances / resolved (Error # 1): potentialScatteringNotConverged

```
WARNING: Potential scattering hasn't converged by L=1 at E=200000.0 eV, xs[1]/xs[0]=1.6284784293% > 0.1%
```

3. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 0: total (Error # 0): CS Sum.

```
WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.26%
```

- fudge-4.0 Errors:

1. Calculated and tabulated Q values disagree.
reaction label 25: n[multiplicity:'2'] + Ce139 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -9750655.058532715 eV vs -9191090. eV!
```

2. Calculated and tabulated Q values disagree.
reaction label 26: n[multiplicity:'3'] + Ce138 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -17205947.52989197 eV vs -1.66682e7 eV!
```

3. Calculated and tabulated Q values disagree.
reaction label 27: $n + H1 + La139$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8689434.005981445 eV vs -8143630. eV!

4. Calculated and tabulated Q values disagree.
reaction label 28: $n + H2 + La138$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -15242875.4026947 eV vs -1.46166e7 eV!

5. Calculated and tabulated Q values disagree.
reaction label 29: $Ce141 + \gamma$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 4879588.367324829 eV vs 5.4284e6 eV!

6. Calculated and tabulated Q values disagree.
reaction label 30: $n + He4 + Ba136$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -2169814.096252441 eV vs -1.5969e6 eV!

7. Calculated and tabulated Q values disagree.
reaction label 31: $H1 + La140_s$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -3528456.084091187 eV vs -2978530. eV!

8. Calculated and tabulated Q values disagree.
reaction label 32: $H2 + La139_s$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -6464867.905044556 eV vs -5833510. eV!

9. Calculated and tabulated Q values disagree.
reaction label 33: $H3 + La138_s$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8985642.462081909 eV vs -8431450. eV!

10. Calculated and tabulated Q values disagree.
reaction label 34: $He4 + Ba137_s$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 4735795.354553223 eV vs 5.3062e6 eV!

• njoy2012 Warnings:

1. Evaluation has no unresolved resonance parameters given
unresr...calculation of unresolved resonance cross sections (0): No URR

---message from unresr---mat 5837 has no unresolved parameters
copy as is to nout

2. Evaluation has no unresolved resonance parameters given
purr...probabalistic unresolved calculation (0): No URR

---message from purr---mat 5837 has no unresolved parameters
copy as is to nout

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 16
only mf4/mf5 provided

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 17
only mf4/mf5 provided

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 22
only mf4/mf5 provided

6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 28
only mf4/mf5 provided

7. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 32
only mf4/mf5 provided

8. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
group...compute self-shielded group-averaged cross-sections (5): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 91
only mf4/mf5 provided